

Atty. Docket No.: PU3703USw  
10/070,633

#### REMARKS

Claims 1-13 are pending in this application. Claims 9, 10, 12 and 14-39 are canceled. The Examiner has rejected claims 1

The Examiner has rejected claims claims 1-5, 9-11 and 13 under 35 U.S.C. 102(b) as being anticipated by Yan et al. (J. Org Chem Oct 18 1996 ) or alternatively Yan et al (J. Comb Chem 1999) or alternatively Huber et al. (Analytical Chimica Acta 28 July 1999). According to the Examiner, Yan et al (1996) and Yan et al (1999) teach ATR continuous monitoring of the reaction kinetics of esterification on the solid surface and interior of a single polystyrene bead. The Examiner also states Huber et al. teaches the use of the ATR-FTIR microspectroscopy for structure confirmation of compounds synthesized in the course of a six step reaction sequence on polystyrene beads. The Examiner has rejected claims 1-4, 12 and 13 under 35 U.S.C. 102(b) as anticipated by Cheng et al (Langmuir 1998) stating that Cheng et al. teaches ATR-FTIR to monitor the tethering of phospholipids bilayers to gold-coated ZnSe crystals. Furthermore, claims 1, 2, and 9-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Eipel et al (US 6,737,024) as purportedly teaching methods of combinatorial chemistry using automated solid phase synthesis, using various discrete supports and ATR.

Applicants have amended the claims and traverse in part the Examiner's rejection. In order to anticipate Applicants' claims, the cited references must disclose each and every element of the claimed method. The Yan and Huber references do not teach direct monitoring as claimed in the present invention. Both Yan references require removing samples of the reaction suspension (p7468 col. 1 and p 53 col. 2 referring to 1996 article). Likewise, Huber refers to monitoring by taking beads from the reaction mixture (page 215 col. 2). The Yan and Huber references require intervening processing steps in order to monitor the reaction with the resulting, inherent disadvantages in such monitoring methods. Similarly, the Eipel reference does not disclose non-intervening monitoring as

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claimed. Moreover, Cheng does not teach or disclose direct monitoring of the reaction as the reaction occurs on multiple supports adhering to the ATR element, as claimed by Applicants. Applicants' amended claims clarify the distinction between the cited references and the claimed invention, especially as pertaining to Applicants' particular method of directly monitoring the reaction. Support for the amendment is found throughout the specification and specifically on pages 5- 8. In light of these amendments and arguments, Applicants request the rejection be withdrawn.

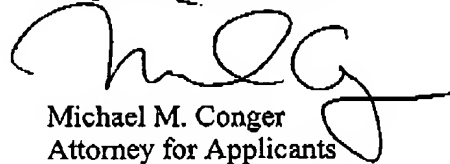
The Examiner has rejected claims 1 and 6-8 under 35 U.S.C. 103 (a) as being unpatentable over any of the 102 references each taken separately in view of Zuellig et al. (U.S. 6,126,904). The cited references do not disclose the Suzuki coupling, Mitsunobu reactions and Friedel-Crafts reactions of claims 6-8. Zuellig discloses synthesis of combinatorial libraries involving Suzuki coupling, Mitsunobu reactions and Friedel-Crafts reactions. The Examiner suggests that the any of the 102 references in combination render obvious to one skilled in the art the inventions of claims 1 and 6-8.

Applicants traverse the rejection. As explained above, none of the 102 references disclose each and every limitation of the claimed invention, and in particular do not disclose the step of directly monitoring the reaction as claimed by Applicants. The 102 references do not disclose the step of contacting an ATR element to the reaction mixture where some of the solid supports then adhere to said ATR element. Neither does do they disclose monitoring the reaction through the ATR element, as set forth in the amended claims. The Zeullig reference does not disclose the claimed method of contacting the ATR element with the reaction mixture and directly measuring the reaction as claimed and nothing in the Zeullig reference renders the claimed invention obvious when viewed alone or in combination with the earlier cited references. In light of these amendments and arguments, Applicants request the rejection be withdrawn.

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Applicants submit that the claims are in condition for allowance and request the claims be given favorable reconsideration. Applicants believe that no fees are due in connection with the filing of this paper other than those specifically authorized herewith. However, should any other fees be deemed necessary to effect the timely filing of this paper the Commissioner is hereby authorized to charge such fees to Deposit Account No. 07-1392.

Respectfully submitted,



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